APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,894	03/04/2002	Masahisa Tamura	1086.1158	1914

			EXAMINER
21171	7590	11/16/2004	DODDS, HAROLD E

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ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/086,894	TAMURA ET AL.
	Examiner	Art Unit
	Harold E. Dodds, Jr.	2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 March 2002</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-35</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-35</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 March 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology

Technical Amendments Act of 2002 do not apply when the reference is a U.S.

patent resulting directly or indirectly from an international application filed before

November 29, 2000. Therefore, the prior art date of the reference is determined

under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C.

102(e)).

2.   Claims 1, 18, and 35 are rejected under 35 U.S.C. 102(e) as being

anticipated by Chung et al. (U.S. Patent No. 6,105,148)

3.   Chung anticipated independent claims 1, 18, and 35 by the

following:

"...an access executing unit which, when an access to a file occurs, processes

said file in accordance with said access..." at col. 15, lines 10-12, col. 5, lines 32-

34, col. 13, lines 65-67, and col. 14, lines 1-2.

"...a user defined process holding unit which holds a user defined process which has previously been defined by the user..." col. 15, lines 10-12 and col. 5, lines 32-34.

"...and a defined process executing unit which executes said user defined process by using the access to said file as a trigger..." at col. 15, lines 10-12, col. 5, lines 32-34, and col. 1, lines 50-56.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5.   Claims 2, 3, 8-12, 17, 19, 20, 25-29, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung as applied to claims 1 and 18 above respectively, and further in view of Suzuki (U.S. Patent No. 6,601,139).

As per claims 2 and 19, the "...by two areas of a data area...," is taught by Chung at col. 5, lines 52-58,

and the "...enables the user to designate...," is taught by Chung at col. 15, lines 10-12,

but the "...file managing unit which manages said file...,"

the "...and a meta data area...,"

the "...and wherein an extended meta data area is provided...,"

the "...for said meta data area...,"

the "...and said file managing unit...,"

and the "...format of said extended meta data area...," are not taught by Chung.

However, Suzuki teaches the managing of files, the use of meta data, and the use of formats as follows:

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"...The remaining portion of the ROM area is managed by a
file system or the like in accordance with the logical
format defined in the MD-DATA standard..." at col. 8, lines
28-31.
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"...When the application is operating, various kinds of meta
data supported by the present architecture, that is, the
data defined as the UW data, may be stored in the RUW area
of the flash memory as required..." at col. 14, lines 20-23.
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"...The total storage capacity of the pre-mastered area and
the recordable user area is about 140 MB..." at col. 9, lines
15-19.
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It would have been obvious to one of ordinary skill at the time of the invention to combine Suzuki with Chung to provide a file management system in order to use standard technology for managing files and gain acceptance of the system. Suzuki with Chung teach the use of related systems. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Suzuki with Chung to use meta data in order to provide information about the structure of data being used. Finally, it would have been obvious to one of ordinary skill at the time of the invention to combine Suzuki with Chung to use formats for data in order to use standard structures of the data and gain acceptance of the system. Chung and Suzuki teach the use of related systems. They teach the use of computers, the use of networks, the use of data areas, the access of files, the use of processes, and the use of applications. Chung provides file access, user-defined processes, and triggers and Suzuki provides file management systems, meta data, and data formats.

6.   As per claims 3 and 20, the "…said file managing unit designates the format…," is taught by Suzuki at col. 8, lines 28-31,

the "…of said extended meta data area…," is taught by Suzuki at col. 9, lines 15-17 at col. 9, lines 15-17 and col. 14, lines 20-23,

and the "…in accordance with contents in said data area…," is taught by Suzuki at col. 8, lines 28-31, col. 7, lines 44-47, and col. 9, lines 15-17.

7.   As per claims 8 and 25, the "…said file managing unit…," is taught by Suzuki at col. 8, lines 28-31,

the "...holds information extracted from said data area...," is taught by Suzuki at

col. 6, lines 9-12, col. 22, lines 35-41, and col. 9, lines 15-17,

and the "...as extended meta data into said extended meta data area...," is

taught by Suzuki at col. 9, lines 15-17 and col. 14, lines 20-23.

In claims 8 and 15, the term "obtain" is used to represent the term

"extract".

8.   As per claims 9 and 26, the "...said extended meta data extracted

from said data area...," is taught by Suzuki at col. 9, lines 15-17 and col. 14, lines

20-23,

the "...is duplicated and held in said data area...," is taught by Suzuki at col. 8,

lines 42-46 and col. 9, lines 15-17,

and the "...and said extended meta data area...," is taught by Suzuki at col. 9,

lines 15-17 and col. 14, lines 20-23.

In claims 9 and 27, the terms "copy" and "store" are used to represent the

terms "duplicated" and "held".

9.   As per claims 10 and 27, the "...in said extended meta data...," is

taught by Suzuki at col. 9, lines 15-17 and col. 14, lines 20-23,

the "...extracted from said data area...," is taught by Suzuki at col. 8, lines 42-46

and col. 9, lines 15-17,

the "...substance is held in said data area...," is taught by Chung at col. 10, lines

13-17, col. 7, lines 66-67, col. 8, lines 1-7, and col. 5, lines 52-28,

the "...and a pointer to the substance in said data area...," is taught by Chung at

col. 17, lines 38-41, col. 10, lines 13-17, and col. 5, lines 52-28,

and the "…is held in said extended meta data area…," is taught by Suzuki at col. 8, lines 42-46, col. 9, lines 15-17, and col. 14, lines 20-23.

In claims 10 and 27, the term "element" is used to represent the term "substance".

10.   As per claims 11 and 28, the "…upon writing into the data area of said file…," is taught by Chung at col. 18, lines 24-26, col. 5, lines 52-58, and col. 5, lines 32-34,

the "…said defined process executing unit changes…," is taught by Chung at col. 15, lines 10-12 and col. 17, lines 10-12,

the "…extended meta data in said meta data area…," is taught by Suzuki at col. 9, lines 15-17 and col. 14, lines 20-23,

and the "…on the basis of said user defined process…," is taught by Chung at col. 15, lines 10-12.

11.   As per claims 12 and 29, the "…upon writing into the data area of said file…," is taught by Chung at col. 18, lines 24-26, col. 5, lines 52-58, and col. 5, lines 32-34,

the "…said defined process executing unit…," is taught by Chung at col. 15, lines 10-12,

the "…sends a message to a user program which is additionally provided…," is taught by Chung at col. 6, lines 23-29 and col. 15, lines 10-12,

the "…and changes…," is taught by Chung at col. 17, lines 10-12,

and the "…extended meta data in said extended meta data area…," is taught by Suzuki at col. 9, lines 15-17 and col. 14, lines 20-23.

12.   As per claims 17 and 34, the "...wherein a size of said extended

meta data area...," is taught by Suzuki at col. 17, lines 24-26, col. 9, lines 15-17,

and col. 14, lines 20-23

and the "...is variable in accordance with the file contents...," is taught by Chung

at col. 17, lines 10-12 and col. 12, lines 9-13.

13.   Claims 4-7, 14, 21-24, and 31 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Chung and Suzuki as applied to claims 3 and 20

above, and further in view of King et al. (U.S. Patent No. 5,537,592).

As per claims 4 and 21, the "...said file managing unit sets meta data..."

Is taught by Suzuki at col. 8, lines 28-31 and col. 14, lines 20-23,

the "...as a format of said extended meta data area...," is taught by Sizuki at col.

8, lines 28-31, col. 9, lines 15-19, and col. 14, lines 20-23,

the "...and determines the format of said extended meta data area...," is taught

by Sizuki at col. 8, lines 28-31, col. 9, lines 15-19, and col. 14, lines 20-23,

but the "...file type...,"

and the "...in accordance with said file type...," are not taught by either Chung or

Suzuki.

However, King teaches the use of file types as follows:

```
"...In step 402 the system sets as ready those processes
which are necessary to determine the file type of the
source and destination disks..." at col. 13, lines 52-54.
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It would have been obvious to one of ordinary skill at the time of the

invention to combine King with Chung and Suzuki to use file types in order to use

different file types corresponding to the file types required by the application

programs and gain acceptance of the system. Chung, Suzuki, and King teach the use of related systems. They teach the use of computers, the use of networks, the access of files, the use of processes, and the use of applications and Suzuki and King teach the use of formats. Chung provides file access, user-defined processes, and triggers, Suzuki provides file management systems, meta data, and data formats, and King provides file types.

14.   As per claims 5 and 22, the "...said file managing unit...," is taught by Suzuki at col. 8, lines 28-31,

the "...determines the file type upon creation of the file...," is taught by King at col. 13, lines 52-54 and col. 23, lines 59-61,

the "...sets the extended meta data area...," is taught by Suzuki at col. 9, lines 15-19 and col. 14, lines 20-23,

the "...in accordance with said file type...," is taught by King at col. 13, lines 52-54,

the "...enables the user to change...," is taught by Suzuki at col. 15, lines 10-12 and col. 17, lines 10-12,

the "...said file type...," is taught by King at col. 13, lines 52-54,

and the "...and change said extended meta data area...," is taught by Suzuki at col. 17, lines 10-12, col. 9, lines 15-19, and col. 14, lines 20-23.

15.   As per claims 6 and 23, the "...said file managing unit ...," is taught by Suzuki at col. 8, lines 28-31,

the "...automatically determines the file type...," is taught by King at col. 5, lines 33-35 and col. 13, lines 52-54,

the "...from the contents in the data area of said file...," is taught by Suzuki at col. 7, lines 44-47, col. 9, lines 15-17, and col. 8, lines 28-31,

the "...and also automatically determines...," is taught by Chung at col. 15, lines 8, lines 50-53 and col. 6, lines 18-21,

and the "...said extended meta data area...," is taught by Suzuki at col. 9, lines 16-19 and col. 14, lines 20-23.

16.   As per claims 7 and 24, the "...said file managing unit...," is taught by Suzuki at col. 8, lines 28-31,

the "...has a tree structure using a directory...," is taught by King at col. 8, lines 4-11,

the "...for managing a plurality of files...," is taught by Suzuki at col. 8, lines 28-31,

the "...and the file type...," is taught by King at col. 13, lines 52-54,

the "...which is set upon creation of the file...," is taught by King at col. 23, lines 59-61,

the "...succeeds a file type of a parent directory...," is taught by King at col. 13, lines 52-54 and col. 25, lines 53-57.

17.   As per claims 14 and 31, the "...said defined process executing unit executes the user defined process...," is taught by Chung at col. 15, lines 10-12 and the "...in accordance with said file type...," is taught by King at col. 13, lines 52-54.

18.   Claims 13 and 30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chung and Suzuki as applied to claims 2 and 19 above

respectively, and further in view of Cole et al. (U.S. Patent No. 6,105,148).

As per claims 13 and 30, the "...upon writing into the data area of said

file...," is taught by Chung at col. 18, lines 24-26, col. 5, lines 52-58, and col. 5,

lines 32-34,

the "...said defined process executing unit...," is taught by Chung at col. 15, lines

10-12,

the "...and changes extended meta data extended in said extended meta data

area...," is taught by Suzuki at col. 17, lines 10-12, col. 9, lines 15-19, and col.

14, lines 20-23,

the "...by using the fact, as a trigger...," is taught by Chung at col. 1, lines 50-56,

the "...by a user program which is additionally provided...," is taught by chung at

col. 15, lines 10-12,

but the "...sets a data area a change flag to a high level...,"

and the "...that said flag has been set to the high level...," is not taught by either

Chung or Suzuki.

However. Cole teaches the setting of change flags as follows:

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"…The server sets the profile property to the indicated
value from the list (step 404) and then sets the property's
change flag (step 406)…" at col. 5, lines 43-46.
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It would have been obvious to one of ordinary skill at the time of the

invention to combine Cole with Chung and Suzuki to set change flags in order to

identify each change with a flag and then proceed with a next step in the

processing that handles multiple changes as one time. Chung, Suzuki, and Cole

teach the use of related systems. They teach the use of computers, the use of

networks, the use of files, the use of processes, and the use of applications and

Suzuki and Cole teach the use of formats. Chung provides file access, user-

defined processes, and triggers, Suzuki provides file management systems, meta

data, and data formats, and Cole sets change flags.

19.   Claims 15 and 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chung and Suzuki as applied to claims 1 and 18 above

respectively, and further in view of Tamer et al. (U.S. Patent No. 6,542,909).

As per claims 15 and 32, the "...for allowing the user to define a

process...," is taught by Chung at col. 15, lines 10-12,

but the "...further having an API...," is not taught by either Chung or Suzuki.

However, Tamer teaches the use of application program interfaces as

follows:

"...In one embodiment of the invention, an application
program interface (API) is provided between a host computer
and a storage system to enable the logical relationship
amongst blocks of data in physical space to be communicated
from the host computer to the storage device..." at col. 9,
lines 62-66.

It would have been obvious to one of ordinary skill at the time of the

invention to combine Tamer with Chung and Suzuki to use an application

program interface in order to provide the host computer and a storage system

with a logical relationship amongst blocks of data in physical space to be

communicated from the host computer to the storage device. Chung, Suzuki, and

Tamer teach the use of related systems. They teach the use of computers, the

use of data areas, the use of files, the use of processes, and the use of

applications and Suzuki and Tamer teach the use of formats and the use of meta

data. Chung provides file access, user-defined processes, and triggers, Suzuki

provides file management systems, meta data, and data formats, and Tamer

provides an application program interface.

20.   Claims 16 and 33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chung, Suzuki, and Tamer as applied to claims 15 and 32

above respectively, and further in view of Moriyama (U.S. Patent No. 6,356,904).

As per claims 13 and 33, the "...wherein said API has a double layer

structure comprising an API...," is taught by Tamer at col. 9, lines 62-66 and col.

15, lines 53-57,

the "...and an API which is executed in a user area...," is taught by Tamer at col.

9, lines 62-66 and col. 4, lines 20-25,

but the "...which is executed in a kernel area...," is not taught by either Chung,

Suzuki, or Tamer.

However, Moriyama teaches the use of kernel areas as follows:

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"...This operating system has a micro-kernel, as shown in
FIG. 3, that provides the basic ·function as the operating
system, thereby making it possible to simultaneously
provide a plurality of program execution environments on
the micro-kernal..." at col. 6, lines 10-14.
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It would have been obvious to one of ordinary skill at the time of the

invention to combine Moriyama with Chung, Suzuki, and Tamer to use a kernel

area in order to provide the basic operations of an operating system. Chung,

Suzuki, Tamer, and Moriyama teach the use of related systems. They teach the

use of computers, the use of data areas, the access to data, the use of processes, and the use of applications and Chung, Suzuki, and Moriyama teach the use of networks. Chung provides file access, user-defined processes, and triggers, Suzuki provides file management systems, meta data, and data formats, Tamer provides an application program interface, and Moriyama provides a kernel area.
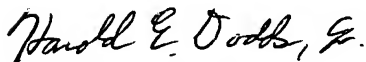
Conclusion

21.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (571)-272-4110. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571)-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harold E. Dodds, Jr.
Patent Examiner
November 10, 2004

GRETA ROBINSON
PRIMARY EXAMINER